

ABSTRACT

The bearing device contains two rolling bearings installed on a shaft 9 and a preload is applied to the inner ring of the rolling bearings. The respective dimension for the two rolling bearing inner rings is shortened on both sides in the orientation of the width dimensions of the inner ring, centered on the grooves for the inner ring, with each being set smaller than the dimension of the outer rings. The difference in dimensions is double the difference in the dimensions capable of eliminating rattling of the rolling bearings, when a preload is applied to the outer edge of the inner ring. The outer rings and races are respectively formed to be in a position at half the width dimension of the inner ring from the outer edges of the two outer rings for the two rolling bearings.